Further evidence of a resident Brown Flycatcher *Muscicapa latirostris* in Borneo

by D. R. Wells and C. M. Francis

Received 28 February 1984

Recent evidence of nesting by Brown Flycatchers *Muscicapa latirostris* in northern Thailand (Wells 1982) lends some degree of support to the idea that the blunt-winged populations of this bird scattered through island Southeast Asia are relics within a formerly more continuous eastern tropical breeding range. None is known from more than about a dozen specimens, nevertheless, and only *segregata* of Sumba island, Indonesia is a proven resident (Siebers 1928). *M.l. randi,* collected in February, August and September at only 3 localities (on 2 islands) has been presumed to breed somewhere in the Philippine archipelago (Amadon & duPont 1970) and the status of *umbrosa*, recently described from a single bird taken near Tawau, Sabah State, Malaysian Borneo, has been inferred only from its collection date – 8 July (Wells 1982).

Further fieldwork in Sabah has now produced more specimens of Brown Flycatchers, including 3 additional *M.l. umbrosa,* allowing a better assessment of the morphology and status of this subspecies. One is a female dated 14 March 1982, from newly logged lowland evergreen forest on the Bole river, a tributary of the Segama west of Lahad Datu, E Sabah. Its largest ovarian follicle is recorded as less than 1 mm in diameter and pale tips to the primary coverts suggest immaturity, but the rest of the plumage is adult and the wear of the wing and tail feathers indicates no recent moult in these tracts. It was probably less than 12 months old and at mid March local breeding need not necessarily have begun.

CMF mist-netted the other 2 together in the understratum of high, primary forest near sea level in Sepilok forest reserve (5°25′N, 117°56′E) near Sandakan, NE Sabah on 27 July 1983. He notes that this was at the end of an exceptional drought, which damaged the forest, and that during the same trapping session several species that normally live in the canopy were caught. We cannot be certain, therefore, that these flycatchers would ordinarily have occurred in the understratum. By plumage and degree of cranial ossification these 2 individuals were both fully adult and are likely to have been a breeding, or recently breeding pair. The male had enlarged testes (longest, unilateral, diameters 7 × 4.5 mm) and the female a late stage, but still featherless, brood-patch. Neither carried visible subcutaneous fat and moult of the inner primaries had begun in both (1 and 2, descendent, new in the female; 1 new, 2 over three-quarters grown in the male), on a schedule typical of known resident insectivorous passerines at Sepilok that year (Francis, unpubl.). Apparently suspended primary moult in the female is matched by suspension in other flycatchers of known resident species (*Cyornis* spp) in the same month and is guessed to have been the outcome of severe weather. The other remiges are worn and the rectrices faded and unevenly abraided, especially in the female, as would be expected in birds that had nested.

There seems little chance that this Sepilok pair had migrated from a more distant breeding ground and *umbrosa* is acceptable beyond reasonable doubt as a Borneo resident. It is the first blunt-winged form of *M. latirostris* demonstrated to occur within continental shelf limits (incidentally near the start of island routes

into the range of *randi*) and within the known regular winter distribution of long-winged northern migrants. How they interact ecologically is not known yet, but the situation is not an uncommon one among Southeast Asian birds.

Description of new specimens of M.l. umbrosa

In most respects, the new specimens affirm the description of the holotype. Their upperparts, wings and tail are the same umber brown, shading to slightly paler more greyish brown on the throat, breast and flanks. In the Sepilok birds this colour extends to the centre of the chin and throat, which are only finely flecked with white, while the Bole river individual has this area more obviously streaked (a range of variation also found in *M.l. randi*). Distal secondary coverts of the type specimen retain fine, rufous-buff tips forming an abraided wing-bar which, it was suggested, would be more prominent in fresh plumaged birds. None of the new specimens shows any dorsal patterning where plumage is worn but the Sepilok male has renewed one inner secondary. This is fairly boldly margined rufous along its outer edge and rufous-buff at its tip, as in the migratory subspecies *M.l. williamsoni* (Wells 1977), and may be taken to represent the coloration of the new wing-bar as a whole.

The only important colour difference shown by the extra specimens is their lesser development of a pale eyelid ring, reduced in all 3 from being narrow but more or less continuous in the type to merely a scatter of minute grey flecks that would not be visible in the field. In this they approach the breeding population of the Thanon Thong Chai range, NW Thailand (Wells 1982).

Soft parts: iris dark brown, feet dark brown, bill dark brown to blackish except for the base of the lower mandible which is yellow or orange-yellow.

Wing formula: the wing tip comprises primaries 6 = 7 (descendent) in the Bole river bird and 7 in the Sepilok pair (7 = 8 in the type). This range of variation has also been noted in *M.l. randi*. In the closed wing of *umbrosa*, primary 9 falls short of the tip by 3.0–4.3 mm more than primary 5. In *randi* (n = 8) this range is 2.0–4.4 mm.

Measurements: summarised in Table 1.

	Holotype ♂ BMNH 1982.2.1	Sepilok ♂ WFVZ	Sepilok ♀ WFVZ	Bole river ♀ WFVZ
Wing (max. chord)	60	62	65.5	61.5
Tail	49.2	48.8	54.1	52.4
Tarsus	12.5	13.0	13.0	13.4
Nalospi	7.4	7.3	7.3	(shot)
Bill width (at level of nostrils)	4.5	4.5	4.7	4.5
Weight	—	8.0	9.0	9.5

Table 1. Some measurements (mm and g) of the 4 known specimens of *Muscicapa latirostris umbrosa*. (BMNH = British Museum (Natural History). WFVZ = Western Foundation of Vertebrate Zoology).

The additional wing measurements (60–65.5 mm) close the gap with *randi* (whose wing-length range is 65–68 mm), leaving *umbrosa* smaller on average but still individually separable by its browner, less distinctly grey cast upperparts, reduced eyelid ring and more extensively dark-tipped lower mandible.

Postscript.

On 8 July 1984, a fully grown juvenile *M.l. umbrosa* was found by CMF being tended by 2 adults in a recently cleared and burnt area just outside the boundary of Sepilok forest reserve. All 3 specimens were collected by CMF and later prepared by Simon Ambi (SA:58

Ad ♂, SA:60 Ad ♀, SA:61 Juv ♂). Both adults were seen feeding the juvenile on separate occasions, clearly indicating recent local breeding, although the testes of the male had already regressed. Their plumage is very worn, with no patterning left on the feathers, although the female has started moulting the inner 2 primaries. Unfortunately the specimens were all somewhat damaged during initial storage in a freezer, but the juvenile plumage can be partially described:- upperparts, wings and tail very dark brown with large buff spots on the back and head; rufous-buff tips to the greater coverts forming a narrow wing bar; secondaries narrowly edged with rufous, the tertials with broad buff edges; the tail with a narrow rufous tip. From what is left of the feathers, the underparts appear similar to those of the adult, but the chest markings are darker brown.

Acknowledgements. CMF wishes to thank Mr. Patrick Andau, Assistant Chief Game Warden of Sabah, for support of ornithological research in the State and for cooperation in allowing him to conduct a bird-ringing programme in Sepilok forest reserve. F. H. Sheldon and J. Kennard who organised collecting on behalf of the Western Foundation of Vertebrate Zoology and L. F. Kiff, Director of the Foundation, very kindly allowed DRW to review their *Muscicapa* material, now all held in Los Angeles.

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Address: D. R. Wells, Zoology Department, University of Malaya, Kuala Lumpur, Malaysia.

Weights and gonad condition of some Thai birds

by David S. Melville and Philip D. Round

Received 14 March 1984

Many studies on the distribution and taxonomy of birds in Thailand have recorded standard body measurements taken from skins (eg. Chasen & Kloss 1932, Deignan 1945, Riley 1938), but little appears to have been published on the weights of Thai birds. Even though some 185,000 birds of 491 species were ringed in Thailand during the Migratory Animal Pathological Survey 1963–71 (McClure 1974a), the only published weights are those given by McClure & Kwanyuen (1973) for 66 species. Even elsewhere in Southeast Asia, only a very few detailed studies on individual species have been reported (Medway 1973, Nisbet 1967, Nisbet & Medway 1972, Ward 1969). Comparatively little has been published on the seasonality of breeding among birds in Thailand (Herbert 1923–26, McClure 1974b, Round 1982), while the only information on gonad condition is that given by Deignan (1945).

In this paper, we present weight and, in some cases, gonad data for 1686 birds of 165 species, collected or examined alive and subsequently released, from 12 sites in NW, NE, Central and SE Thailand during September 1980 to December 1982. No data were collected during the months June to August, but there is a fairly even spread for the rest of the year, with most data for January, April and December. Details for shorebirds will be presented elsewhere. Details of the study sites are given in Table 1.